

# CONNX<sup>®</sup> Case Study

## The University of Toledo - Toledo, Ohio

Easy data integration and access complete the course



**University Hall**  
**The University of Toledo**

- CONNX enables the University to improve services at a reasonable cost in the face of severe budget constraints while moving forward with innovative projects such as Web applications.
- University developers use CONNX to create extensions to the Web for Students portal, increasing usage, efficiency, and student satisfaction.
- CONNX users gain access to integrated VSAM mainframe files and the University Active Directory within one month of the project's initiation.

Located at the westernmost tip of Lake Erie, The University of Toledo is one of the 13 state universities in Ohio. Among the "Points of Pride" listed on its Web site is the fact that it is recognized as a "major force" in contributions to the discovery of new technology.

No small wonder then, that it was one of the many CONNX customers who learned that they could enable access to IBM mainframe-based (SCT PLUS) VSAM files in real-time with very little trouble. Joseph Sawasky, Senior Director of Administrative Computing, led the drive to get the new system that included this feature up and running.

He said that, due to budgetary constraints, the University of Toledo's current IS strategy is to extend the life of their very reliable legacy technology by concentrating on initiatives that offer high return on investment.

"CONNX was a relatively low-cost

middleware tool that opened up a whole new world of possibilities for us. It allowed UT's software developers that were versed in Active Server Pages, database technologies, and XML to quickly tap into our enterprise data stores, without having to learn proprietary middleware protocols. CONNX is allowing us to deliver real 'business' solutions in a much more timely manner."

With the help of CONNX, the university developed and implemented an online course-search engine that was integrated tightly into the Web for Students online application. This application allowed students to search for courses within their areas of study, and to limit searches to particular combinations of days and times when the classes were offered. Though very well received, it was recognized that the application would best be served by real-time access to the data.

Two onsite developers, Robert

Spiker and Dan Ach, developed extensions to the current Web for Students portal application using CONNX to connect to the mainframe datasets in real time. The application now offers up-to-date information; students can search for courses in their particular area of study, then drill down deeper to find courses that fit into their work and personal schedules. They can also ensure that there are open seats in the course prior to registration. With a current full-time enrollment of nearly 21,000, the additional technology makes a great deal of difference, providing students, faculty, and administration with the best of both worlds.

"Impediments to registration were reduced, frustration levels went down, and student service was improved, all at the same time. From a software development standpoint, the great thing was that very little rework was necessary in the application," says Sawasky.

The University of Toledo Case Study continued

"The benefits of using a Web interface with real-time enterprise data are huge," he continues. "University students perform over 95 percent of registrations through the self-service Web for Students application. And, as we bring more value to the Web portal through nimble development efforts using CONNX, we will increase the usage, efficiency, and ultimately, student satisfaction."

CONNX also helped the university reduce costs and increase savings and income. "We believe that money spent on CONNX ... has extremely high ROI when compared to multimillion dollar ERP replacement projects."

Like so many other state-run schools, the university is caught in a fiscal crunch. Sawasky says, "Given the current budget woes in Ohio, we are being forced to be creative and frugal, and still move forward with innovative projects in the near-term. These include new Web applications, and planned integration with workflow tools for internal business projects. These are generally features of new-generation ERPs, and if we can deliver them at a fraction of the cost, then we're helping the university meet the challenges of improving services in the face of severe budget constraints."

Once the pieces were in place, Systems Programmer Jeff Janson configured the CONNX environment for the development staff, while Kathy Diegel, a database developer, mapped the mainframe files into the CONNX environment, documented it for others on staff, and developed an initial application. Within a month, CONNX users had access to IBM mainframe (SCT PLUS) VSAM files, Microsoft SQL Server databases, and the legacy University Active Directory at the same time from within the same application. The Web developers say they like using CONNX, as it

enables them to use familiar Web tools to deliver new solutions.

The State of Ohio developed a statewide initiative in which institutions of higher education were required to develop XML applications that allowed for the exchange of course transfer information. Potential transfer students would be able to send their transfer course and credit information from one school to the central transfer site where it would be available to other schools.

With CONNX, The University of Toledo was one of the first universities to deploy a production prototype application that fulfilled the requirements of the initiative. "We used CONNX to query the live mainframe Student Information System database, parse the results into the required XML format, and then post the information to the central host site. CONNX allowed us to mitigate the cross-platform data transport challenges and perform our software development in one environment. It worked great for us!" explains Sawasky.

As far as CONNX technical support and market alternatives go, Sawasky says, "We were very impressed with technical support. They were readily available and provided very timely solutions."

And as for the competition: "We reviewed other potential solutions, and there was nothing in this product space in this price range with comparable robust features and fantastic performance."

About The University of Toledo: A state-supported institution located at the easternmost tip of Lake Erie, The University of Toledo enrolls approximately 21,000 students. The university began in 1872 as a private arts and trades school. In the 125 years since, it has grown into a comprehensive institution offering more than 250 undergraduate and graduate programs to over 20,000 students from around the world.

About CONNX Solutions: CONNX Solutions, Inc., with its flagship software product, CONNX, brings universal data access technology to over 3,000 organizations worldwide by enabling access to all enterprise data, regardless of origin, through one interface. The company maintains strategic relationships with industry-leading organizations including Microsoft Corporation; Oracle Corporation; Sybase Inc.; Informix; Computer Associates International, Inc.; IBM Corporation; and Hewlett Packard. Founded in 1989, CONNX remains locally owned and managed through its headquarters in Redmond, Washington.



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